



PGDS v4.2

Key Changes

May 2, 2014



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Update to PGDS v4.2 – Overview

- Public comments for PGDS v4.1
 - Comment period was from September 15, 2011 through June 1, 2012
 - Over 450 individual comments and changes were received from industry stakeholders
 - 159 response documents were generated by Systems Optimization Support (SOS) Team to address all of the industry changes and comments
 - Additional change requests were received from internal TSA groups (OSH&E, IV&V, etc.)
 - A follow-on study to better define mini in-line systems and their throughput capability based on varied resource allocations was also included



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Update to PGDS v4.2 – Overview

- After additional discussions with industry representatives, it was collectively decided that an intermediate version (v4.2) would be created
 - All industry comments accepted by TSA would be incorporated
 - Additional new text added by TSA would be highlighted and reviewed by industry for comment before incorporation
- A new process is being established for management of the document and collaboration between TSA and the industry
 - An internal TSA Technical Review Committee will be established to review comments
 - Quarterly PGDS Industry Exchange meetings are being held with an Industry Working Group
 - Publication of v5.0 is expected in 2014



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PGDS v4.1 to v4.2 – Key Changes

PGDS v4.2 Chapters	Type of Change
Cover and General Info <ul style="list-style-type: none">• N/A• Page ii• Page ii• Page ii• Page xii• Page xv• Page xvii• Page xvii	<ul style="list-style-type: none">• Updated signatory list• Updated PGDS email to: PGDS@tsa.dhs.gov• Added a new paragraph outlining the new process for industry collaboration and comments• Updated PGDS v4.2 comment form link• Changed “Smiths HiScan 10080 XCT” to “Smiths Detection HI-SCAN 10080 XCT”• Changed acronym “DCV” to “ICS – Individual Carrier System”• Added Beumer Corporation as contributor• Added Faith Group as contributor



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PGDS v4.1 to v4.2 – Key Changes

PGDS v4.2 Chapters	Type of Change
Chapter 2 <ul style="list-style-type: none">• Page 2-2• Page 2-3• Page 2-3• Page 2-4• Multiple• Page 2-17• Page 2-22	<ul style="list-style-type: none">• Removed “or an airline (if the system is for an airline-owned terminal)” from project sponsor definition• Design review process sequence of events updated• Project Sponsor will submit a written response to all TSA comments on the Design Submittal• Removal of requirement for hard copy (binders) for Concept and Design Phase submittals• Removed requirement for documentation of stakeholder approval from each design phase• Updated In-Line Support Application link• Additional pertinent details added to list of information to provide in 70% design drawings<ul style="list-style-type: none">• Maintenance areas around EDS• CBRA Spatial Dimensions• Egresses for TSA personnel• Stairways for TSA personnel• EDS machine removal paths



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PGDS v4.1 to v4.2 – Key Changes

PGDS v4.2 Chapters	Type of Change
Chapter 3 <ul style="list-style-type: none">• Page 3-4• Page 3-7• Page 3-7• Page 3-7• Page 3-8• Page 3-12• Page 3-12• Page 3-12 & 3-32• Page 3-24• Page 3-39	<ul style="list-style-type: none">• Reworded definition of Security Tracking Zone (STZ)• Developed new Table 3-1 and updated classification of EDS machines including availability and throughput and added updated relevant specification information• Updated ETD Rates (SSI only)• Change Smiths HI-SCAN 10080 XCT Idealized Throughput from TBD to 1800 and 95% Throughput to 1710• ILDT to contact RDC for false alarm/OSR clear rates and conveyable bag dimensions instead of OEM• Changed Smiths HiScan to “Smiths Detection HI-SCAN 10080 XCT”• Change Max Bag size to 149.6/63 x 39.4 x 31.54 in order to include OOG size• Added product pages for Smiths HI-SCAN and Reveal CT-80DR+• Added new schematic for Mini In-line System and write up comparing various system configurations and associated throughput impacts for intermittent flow EDS• Added Independent Carrier Systems (ICS) as other baggage conveying systems types



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Chapter 5 <ul style="list-style-type: none">• Page 5-5• Page 5-5• Page 5-5• Page 5-7• Page 5-7	<ul style="list-style-type: none">• Recommendation that passenger arrival distributions be obtained directly from airlines• ILDTs should request default arrival curves from RDC if better data not available• In 5.2.6, changed first sentence to “Where possible, and with TSA’s concurrence, the arrival distribution may be obtained directly from the airlines”• Average checked bag/passenger rates updated to 0.6 domestic and 1.2 international• In 5.2.7, reworded last paragraph to, “These are very generic ranges, and planners should obtain and substantiate locally collected specific values for the types of carriers and markets served whenever possible.”

Bold represents new wording



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PGDS v4.2 Chapters	Type of Change
Chapter 6 <ul style="list-style-type: none">• Pages 6-5 & 6-6• Page 6-8• Page 6-9• Page 6-9	<ul style="list-style-type: none">• After the examples in 6.1.3 and 6.1.4, included, “The numbers presented in this example are used for illustrative purposes, and in no way represent the actual values for the variables. To obtain actual values please contact your TSA representative.”• When simulating a proposed system, the surge factor should not be applied if the baggage rate is sampled in one minute intervals• Multiple simulation runs should be performed to explore sensitivity to variables• Recommended adding historical data for jam rates and locations to simulations, if available



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PGDS v4.2 Chapters	Type of Change
Chapter 7 <ul style="list-style-type: none">• Page 7-3• Page 7-4• Page 7-4• Page 7-8• Page 7-8• Page 7-10• Page 7-16• Page 7-17• Page 7-17• Page 7-20 to 7-23• Page 7-24 to 7-25	<ul style="list-style-type: none">• Limitations on allowance of redundant mainlines• Updated definition of 12” bag spacing• Updated Screening Throughput Capacity Best Practices• Added Tracking Standard Prior to EDS Machines• Updated BHS Tracking Best Practices• Updated Conveyor Management• Removed Pre-EDS Bag Jam Rate Requirement• Updated Best Practices for BHS Displays at CBRA OS and OOG lines• Added standard that no recirculation or purge lines should be designed• Added STIP Data Requirements• Reduced CBIS Reporting Requirements



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PGDS v4.2 Chapters	Type of Change
Chapter 8 <ul style="list-style-type: none">• Page 8-1• Page 8-4 to 8-8	<ul style="list-style-type: none">• Added useful life of BHS assumed to be 20 years• Updated CBIS related cost assumptions
Chapter 9 <ul style="list-style-type: none">• Page 9-2• Page 9-3 to 9-4• Pages 9-5 to 9-6• Page 9-11• Page 9-12 to 9-13• Page 9-15 to 9-19• Page 9-18• Page 9-20• Pages 9-21 to 9-27	<ul style="list-style-type: none">• Updated optimal layout of CBRA to remove automated reinsertion• Updated CBRA cross-section with elevations• Updated CBRA Conops• Added note that ILDT should contact RDC for latest specifications of equipment to be provided for a specific site• Updated BSD Design Considerations• Improved CBRA drawings and BSD, BRP and BIT display examples• Changed “Purge Bag” to “Purge Bag Data” in text and Figure 9-13• Updated General Design Considerations regarding bag lifting and re-insert lines• Safety updates to CBRA physical requirements



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PGDS v4.2 Chapters	Type of Change
Chapter 10 <ul style="list-style-type: none">• Throughout Chapter	<ul style="list-style-type: none">• OSH&E updates and revisions
Chapter 11 <ul style="list-style-type: none">• Page 11-1• Page 11-2	<ul style="list-style-type: none">• Updated introduction to better explain contingency planning definitions• Updated Design Recommendations to Facilitate Contingency Planning
Appendix A <ul style="list-style-type: none">• Pages A-9 & A-13• Page A-34	<ul style="list-style-type: none">• CBRA Executive Summary Report example added• Updated web link to PGDS comment form
Appendix B <ul style="list-style-type: none">• Pages B-1 - B-13• Page B-11• Pages B-11 to B-13• Pages B-13 to B-21• Pages B-13 to B-21	<ul style="list-style-type: none">• Changed DCV to ICS (Individual Carrier System) throughout Appendix B• Changed “unorthodox” to “unconventional”• Reintroduced Destination-Coded-Vehicles (DCV) Based Design Concepts• Inserted Mini In-line EDS Operational Overview based on follow on study and simulation of various intermittent flow CBIS configurations• Removed previous drawings of Mini In-line CBIS design concepts and description



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Appendix D <ul style="list-style-type: none">• Page D-1• Throughout Appendix	<ul style="list-style-type: none">• Added table of TSA ISAT Bag Dimensions• Updated testing sections to match changes to recently revised test plan (SSTP) templates<ul style="list-style-type: none">• Split Over-Height, Over-Width, Over-Length and Delayed/Accelerated Bag into individual tests• Updated several tests:<ul style="list-style-type: none">• Travel Time/OSR Test; OOG/Lost Bag; Mixed Bag; Halt/Fail Safe; IQ Functionality; System Mixed Bag; System Throughput• Added several EDS testing requirements:<ul style="list-style-type: none">• Decision Expiration Functionality; EDS Entrance and Exit Jam Recovery; Crossover Test
Appendix E <ul style="list-style-type: none">• Page E-11	<ul style="list-style-type: none">• Included the sentence, “Local Lock-Out Tag-Out procedures should be followed.”
Appendix F	<ul style="list-style-type: none">• Removed TSA Funding Policy information from this appendix because it is to be published as a separate document• Renamed Cost Estimating Appendix



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Appendix G <ul style="list-style-type: none">• G 1-4• Throughout Appendix	<ul style="list-style-type: none">• Deleted the line in G.1.4.2.1 that says, “The system will switch EDS line feed methods from a round robin routine to a first available function to prevent a die-back situation.”• Revised with 2 new examples from:<ul style="list-style-type: none">• ORD Terminal 1 B South• MYR
Appendix H <ul style="list-style-type: none">• Throughout Appendix• Throughout Appendix	<ul style="list-style-type: none">• Checked Baggage Screening Equipment SSI Identification Guide removed from PGDS• Changed to Appendix I: “Risk Based Security Impacts for the Electronic Baggage Screening Program



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Explanation of updates to Table 3-1

- The idealized throughput was recalculated based on the integer value of the belt speed of the 1st queue before the EDS
 - Since queue conveyors are typically programmed in increments of 10 feet/min, the values in this column were rounded up to the next closest multiple of 10
- There are 2 primary reasons for selecting the external belt speed for this calculation instead of the internal EDS belt speed:
 - TSA can verify and validate the speed of the external conveyors of the system, but not the internal EDS conveyor speed
 - TSA can verify and validate the bag spacing on the external conveyor belt, but not inside the EDS
- A footnote was added to the throughput values on the mini in-line and stand-alone EDS equipment to contact TSA for current throughput design numbers
 - The numbers provided by industry have not been validated by TSA for this equipment in this configuration



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